

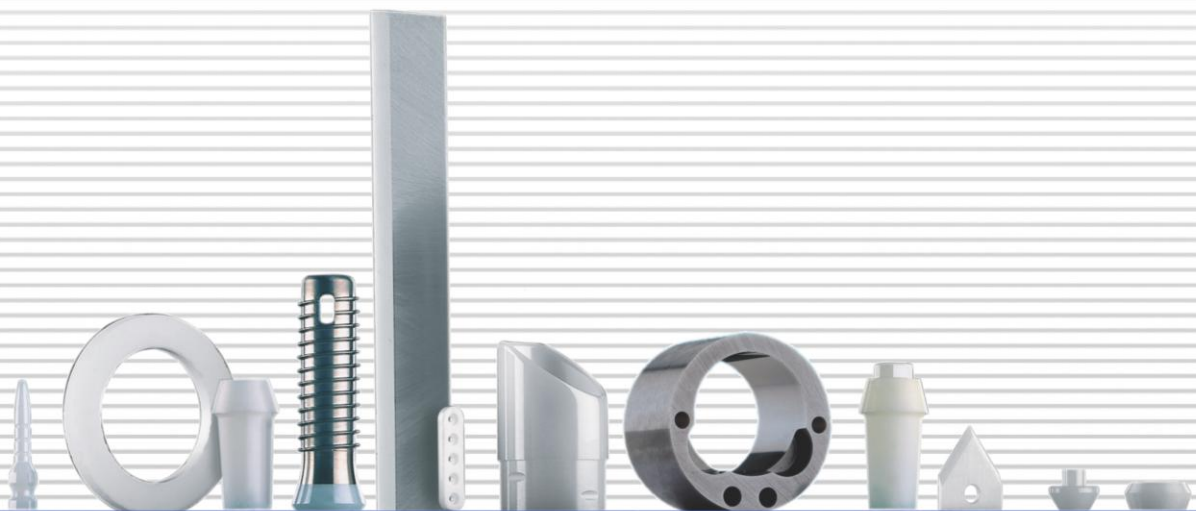
Parts for the Medical Industry

Ceramaret designs and produces components out of the hardest of materials such as Advanced Ceramics (zirconia, alumina) and synthetic sapphire and ruby. Due to their outstanding properties, these materials are used in specific applications requiring durability (high resistance to wear, corrosion, heat, pressure, and hostile gas and liquid environments) as well as excellent dielectric strength and biocompatibility.

The medical industry is very demanding. Ceramaret provides the necessary resources in R+D, manufacturing and quality assurance to meet all requirements for products to be fully approved by the medical instrument manufacturers.

Ceramaret has a standard of excellence that customers and partners can count on. Emphasis is placed on rational, intelligent and innovative solutions. Technical requirements are met in consideration of economics and environmental impacts, as well as in compliance with strict safety standard.

Ceramaret is ISO 9001:2000, ISO 14001:2004 and ISO 13485:2003 certified.



Parts for the Medical Industry

- Materials** :
- Alumina ceramics 96%, 99,7% or 99,9% (other purity on request).
 - TZP Zirconia Ytria stabilized, HIP treated on request.
 - Zirconia Magnesia stabilized
 - ZTA Zirconia Toughened Alumina (90% Al₂ O₃ + 10% Zr O₂ or 20% Al₂ O₃ + 80% Zr O₂)
 - Synthetic Ruby and Sapphire.

- Philosophy** :
- Compaction of the powder as close as possible to the final dimensions to avoid costly secondary machining operations.

- Resources** :
- Personalized assistance.
 - R+D facility with Scanning Electron Microscope, equipped with an energy dispersion micro sensor permitting the analysis of material composition.
 - CAD facility.
 - State of the art quality assurance measuring equipment.
 - Modern production facility with single and double effect presses, CIP (Cold Isostatic Pressing) and HIP (Hot Isostatic Pressing) facilities, CNC machines
 - Centerless grinding.
 - Mass-polishing (Maret Polishing Method).
 - Tool design facility.

Typical applications:

- Rotors for high speed air motor.
- Guides for implants.
- Blades.
- Insulators.
- Balls & Seats for non-return micro-valves.
- Micro-pistons for dispensing pumps.
- Rotors and Stators for switching valves.

Field of applications:

- Endoscopy
- Microtomy
- Electrosurgery
- Endosurgery
- Dentistry
- Ophtalmology
- Micro-surgery